Chapter 5

Developing a Kanban Design

Once you have determined the kanban quantities, the next step is design of the kanban scheduling signal. Chapter 5 of the book provides several design options for your consideration, adoption, or modification. Use these suggestions to select or create your own kanban scheduling signal.

When you have determined what type of scheduling signal you will utilize, develop rules to control the operation of the kanban. The rules should include the following items:

- The part numbers covered by the kanban
- How the design works--how the cards, magnets, etc., move
- The meaning of the scheduling signals and how to interpret them
- Any scheduling rules of thumb (if required)
- The preferred production sequence (if one exists)
- To whom to go for help and what the "helpers" should do if contacted
- Any special quality or documentation requirements

Remember, you draft rules to communicate how to run the kanban and to allow the process operators to schedule the line. The only way the production operators can take over scheduling the line is by having rules that provide clear direction and scheduling guidance.

After you have the rules developed, develop a visual management plan to communicate how the kanban operates. Anticipate what questions will arise from

people operating and supporting the kanban, and then develop visual management items to answer the questions and guide the operators.

Finally, develop an implementation plan for deploying the kanban. The plan should address laying out the kanban, coordination of the design, training of all the participants, and the actual transformation from the current scheduling system to kanban scheduling.

Design Questions

Consider the following questions when making the decision on a kanban signal:

How does the material flow?

- How/where is the material staged? Is the material staged in one location or several locations?
    - _____
    - _____
    - _____
    - _____
- Who moves the material?
    - _____
    - _____
- What are the product container sizes and shapes?
    - _____
    - _____

- _____

What potential kanban signals might be used to control this kanban?

- _____
- _____
- _____
- _____

Review each potential signal for these items.

- Ease of transfer of each potential signal?
- Collection point for each potential signal?
- Return path to collection point for each potential signal?

After completing your review of each signal, select the signal to control the kanban based on the answers to the above questions.

- _____

What are the visual management needs?

- Flow Diagram? (Figure WB 5-1 contains a blank form for this activity and Figure WB 5-2 contains the example from the book.)
- Signs?
  - Posted Rules
  - _____
  - _____
- Andons?
  - _____

- _____
- _____

Training List

When developing the kanban training list, answer the question of who touches the product and what do they do with the product? Also determine of what type of training they need to successfully support or operate the kanban? Consider these questions in terms of the groups versus actual people. Use the annotated training list form in Figure WB 5-3 and the blank training list in Figure WB 5-4 to develop a list of groups that will need training to operate the kanban. In Chapter 6 we will use this information to create training for these groups.

Figure WB 5-1

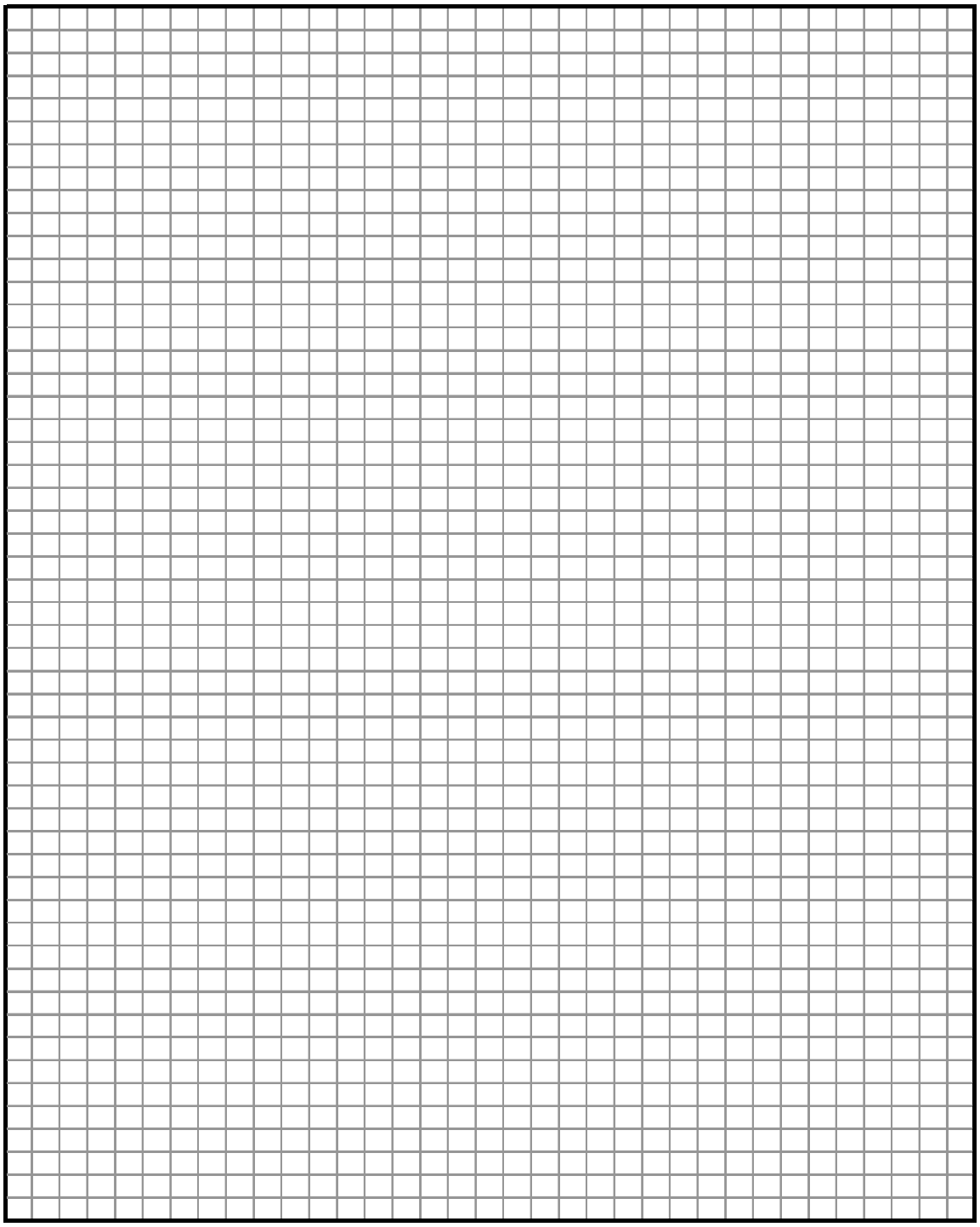

Figure WB 5-2

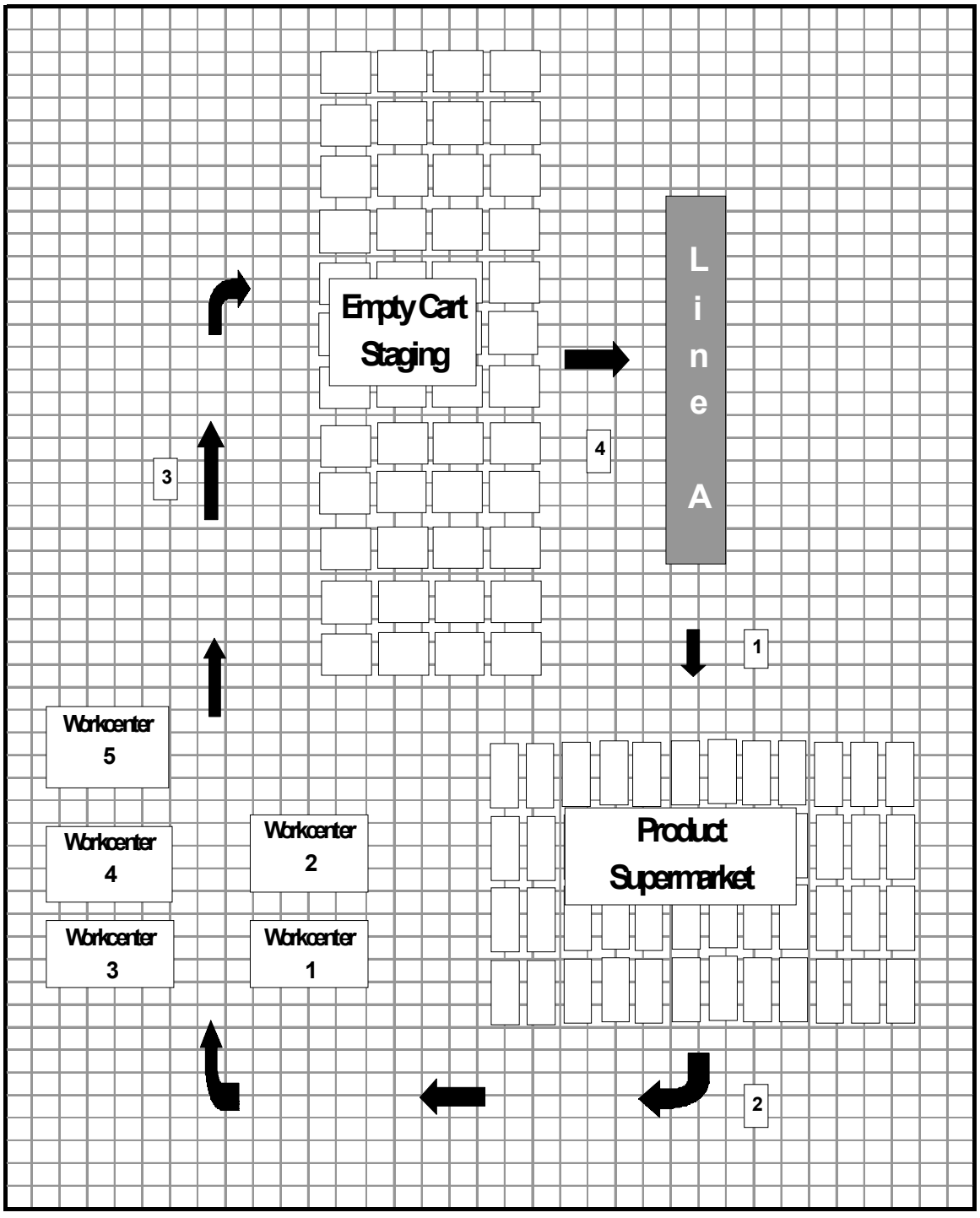
Empty Cart Staging
Line A
4
3
1
Workcenter 5
Workcenter 4
Workcenter 3
Workcenter 2
Workcenter 1
Product Supermarket
2

Figure WB 5-3

Kanban Training List

To develop the training list, answer these three questions:

- Who touches the product?
- What do they do with the product?
- What type of training will they need to successfully support or operate the kanban?

Group:	**Required Training:**
Operators	*Process Design/Basic Kanban theory*
Production Supervisors/Managers	*Process Design/Basic Kanban theory*
Schedulers/Materials Managers	*Kanban Workshop/Process*

	Design/Auditing
Material Handlers	*Process Design/Material Flow*

Figure WB 5-4

Kanban Training List

To develop the training list, answer these three questions:

- Who touches the product?
- What do they do with the product?
- What type of training will they need to successfully support or operate the kanban?

Group:	**Required Training:**